

## 2012 Groundwater Sessions

Title	# Oral Sessions
Dynamics of Fluids and Transport in Fractured Porous Media	2
Environmental Vadose Zone Hydrology	0
Exploring Environmental Impacts of Hydraulic Fracturing in the Subsurface	0
Groundwater-Surface Water Interactions: Dynamics Across Spatial and Temporal Scales	2
Groundwater-Surface Water Interactions: Three Decades of Transient Storage Analysis to Understand River Transport Watershed Connections	0
Hydrological, Geomorphological, Biological, and Geochemical Processes in Karst Aquifers	0
Characterization of Groundwater Systems	2
Microorganisms, Colloids, Engineered Nanoparticles, and Emerging Contaminants in the Environment	2
Shallow and Deep Geothermal Systems: Characterization, Integration, Stimulation, Simulation, and Induced Seismicity	2
Groundwater-Surface Water Interactions: Quantifying Their Functional Relevance with Measurements and Models of Water and Solute Dynamics	1
Multiphase Flow, Interfacial, and Geomechanical Processes Controlling CO <sub>2</sub> Sequestration	3
Advanced Computational Modeling Paradigms for Hydrologic Systems	0
Large-Scale, Long-Term Changes in Catchment Hydrology and Water Quality	1
Sustainable Remediation of Contaminated Groundwater	0
Reactive Transport in Permeable Media	1
Advances in Geochemical and Hydrogeological Studies of CO <sub>2</sub> Fate and Transport at Geological CO <sub>2</sub> Sequestration Sites	3
Anomalous Transport, Mixing, and Reaction in Hydrological Systems	2
Developing the Science for High-Resolution Water-Energy-Biogeochemical Cycle Modeling	1
Remote Sensing, Modeling, and Ground-Based Monitoring of Groundwater Resources	2
Uncertainty Quantification and Parameter Estimation: Impacts on Risk and Decision Making	3
Isotope Techniques for Revisiting Water Cycle in Catchments	1
Recent Advances in Modeling Water in the Coupled Earth System	1
Underground Testing, Monitoring, and Modeling in Different Formations	0
A Vision for the Future: Exploring the Value of Geophysics in Hydrology	1
Hydrogeophysics: Lab to Field Scale Characterization	1
Recent Advances in Groundwater Hydrology	0
Novel Developments in Characterization and Modeling of Physical, Chemical, and Biological Processes Controlling Contaminant Transport and Remediation	3

Geological CO <sub>2</sub> Storage Monitoring From Injection Zone to Vadose Zone: Characterization, Detection Methods, and Field Applications	1
Nonpoint Source Fluxes in the Vadose Zone and Groundwater	1
Modern Approaches in Hydrogeology: Conceptual and Numerical Model Advances in Cross-Disciplinary Approaches	1
Recent Advances in Theoretical, Numerical, and Experimental Methods in Flow and Transport in Porous Media	2
Complexity, Falsifiability, Transparency, and Uncertainty in Environmental Modeling	1
Advances in Uncertainty Assessment and Sensitivity Analysis Methods for Hydrological Modeling	1
Persistent Problems and Modern Approaches in Multiphase Flow and Transport in Porous Media: From Pore to Laboratory and Field Scale	1
Measurement, Modeling, and Management of Coastal Aquifers	2
Theoretical, Numerical, and Experimental Advances in Pore Scale Investigation of Porous Media	2
Impacts of Groundwater Inputs to Coastal Ecosystems	0
Understanding Process Dynamics in the Critical Zone at Different Scales	1